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VOLENTINE FRANCOS WHITT

#5964 P.009

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Amendments to the Drawing Figures:

The attached drawing sheet includes proposed changes to FIG. 7 and replaces the original sheet including FIGs. 6 and 7. In particular, the reference labels 1m and 1n that are mentioned in the specification have been added to FIG. 7.

Attachment: Replacement Sheet.

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REMARKS/DISCUSSION OF ISSUES

By this Amendment, Applicants amend claims 2, 4-14, and 16, cancel claim 1, and add new claims 17-21. Accordingly, claims 2-21 are pending in the application.

Applicants thank the Examiner for acknowledging the claim for priority and receipt of certified copies of all the priority documents.

Claims 10 and 14 are amended to correct typographical errors in their respective dependencies.

Claims 4-9, 11-13 and 16 are amended for non-statutory reasons, to replace European-style claim phraseology with American-style claim language. The claims are not narrowed in scope and no new matter is added.

New claims 17-21 are added to at least partially restore the original range of claims that existed before multiple dependencies were removed in the preliminary amendment. No new matter is added.

DRAWING OBJECTIONS

In response to the Examiner's objection to the drawings, Applicants respectfully submit herewith a Replacement Sheet for FIG. 7. Accordingly, Applicants respectfully request that the drawings be approved.

SPECIFICATION OBJECTIONS

In response to the Examiner's objections to the specifications, Applicants respectfully submit herewith amendments to the specification. Accordingly, Applicants respectfully request that the objections to the specification be withdrawn.

DOUBLE PATENTING

Applicants acknowledge the provisional obviousness-type double patenting rejection of claims 5-6 and 15-16 over co-pending U.S. patent application 10/514,4189.

Applicants will consider the advisability of filing an appropriate Terminal Disclaimer once the claims of this application are otherwise in condition for

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allowance.

35 U.S.C. § 112

The Office Action rejects claim 10 under 35 U.S.C. § 112 for a typographical error regarding the dependency of the claim. Applicants hereby amend claim 10 to properly depend from claim 6, rather than claim 4. Applicants respectfully submit that the antecedent basis issue is corrected by this correction of dependency.

Accordingly, withdrawal of the rejection of claim 10 under 35 U.S.C. § 112 is respectfully requested.

35 U.S.C. § 102 and 103

The Office Action rejects: claims 2 and 12 under 35 U.S.C. § 102 over Masuda et al. U.S. Patent 6,340,999 ("Masuda"); claim 5 under 35 U.S.C. § 102 over Taira et al. U.S. Patent 5,712,694 ("Taira"); claims 4, 9 and 11 under 35 U.S.C. § 103 over Masuda in view of Okawa JP 11231320 ("Okawa"); claim 6 under 35 U.S.C. § 103 over Taira in view of Okawa; claims 7, 8 and 14 under 35 U.S.C. § 103 over Masuda; claim 10 under 35 U.S.C. § 103 over Masuda in view of Okawa and further in view of Maeda et al. U.S. Patent 7,021,812 ("Maeda"); claim 13 under 35 U.S.C. § 103 over Masuda in view of Umemoto et al. U.S. Patent 6,366,409 ("Umemoto"); and claims 15-16 under 35 U.S.C. § 103 over Shinohara et al. J.P. 2001-243822 ("Shinohara").

Applicants respectfully submit that all of the pending claims are patentable over the cited art for at least the following reasons.

Claim 2

Claim 2 has been rewritten to be independent form without any change in scope.

Among other things, in the surface illumination device of claim 2 the reflecting prism face extends so that a direction of electric vector's vibration of an s-polarized light component of a reflecting light ray caused by an incident light ray in a predetermined propagation direction is in parallel with a polarization axis of the

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polarizing plate.

The Office Action states, without any support or explanation whatsoever, that such a feature is somehow "inherent" in <u>Masuda</u>.

Applicants respectfully disagree and traverse the statement of inherency as being directly contrary to the provisions of M.P.E.P. § 2212(IV).

M.P.E.P. § 2212(IV) provides that:

EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' "In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted).

(emphasis added). <u>See also M.P.E.P. § 2144.03 citing In re Lee</u> 277 F.3d 1338 (Fed. Cir. 2002). ""Conclusory statements such as those here provided do not fulfill the agency's obligation." In re Lee at 1344.

Moreover, Applicants respectfully submit that such a feature could not

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possibly be inherent in <u>Masuda</u>. Indeed, <u>Masuda</u> very clearly teaches that polarizer 4 is a <u>circular</u> light polarizer which circularly polarizes the received light (<u>see</u> col. 11, lines 45-51).

Accordingly, for at least these reasons, Applicants respectfully submit that claim 2 is patentable over <u>Masuda</u>.

Claim 3

Among other things, in the surface illumination device of claim 3 the reflecting prism face extending so that a direction of electric vector's vibration of an s-polarized light component of a reflecting light ray caused by an incident light ray in a predetermined propagation direction is in parallel with a polarization axis of the polarizing plate.

Unlike the rejection of claim 2, in the rejection of claim 3 there is no mention of inherency, and instead the Office Action maintains that this feature is explicitly shown in FIG. 9 of <u>Masuda</u>.

Applicants respectfully disagree.

Very clearly, FIG. 9 of Masuda does not show any polarization axis of polarizer 4 (which in any event is a <u>circular</u> polarizer - <u>see</u> col. 11, lines 45-51). FIG. 9 also does not show a direction of electric vector's vibration of an s-polarized light component of a reflecting light ray caused by an incident light ray in a predetermined propagation direction. So FIG. 9 cannot possibly show that the reflecting prism face extending so that a direction of electric vector's vibration of an s-polarized light component of a reflecting light ray caused by an incident light ray in a predetermined propagation direction is in parallel with a polarization axis of the polarizing plate.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 3 is patentable over <u>Masuda</u>.

Claims 4, 9 and 11

Claims 4, 9 and 11 all depend from claim 2. Okawa does not remedy the shortcomings of Masuda with respect to claim 2. Accordingly, claims 4, 9 and 11 are all deemed patentable for at least the reasons set forth above with respect to claim 2, and for the following additional reasons.

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REQUEST FOR ENGLISH TRANSLATION OF CITED DOCUMENT

At the outset, <u>Okawa</u> is published in Japanese, not English. M.P.E.P. § 706.02 provides that:

If the document is in a language other than English and the examiner seeks to rely on that document, a translation must be obtained so that the record is clear as to the precise facts the examiner is relying upon in support of the rejection.

Accordingly, rejections based on <u>Okawa</u> are inappropriate unless the Examiner has provided a full translation of that document, which he has not done here. Therefore, if the Examiner desires to maintain a rejection of any of Applicants' claims based on <u>Okawa</u> in a subsequent Office action, Applicants respectfully request that he supply an English translation of the full text (not just the abstract) of the document, as required by M.P.E.P. § 706.02.

Furthermore, Applicants respectfully traverse the proposed combination of Masuda and Okawa as lacking any teaching or suggestion in the prior art.

M.P.E.P. § 2143.03 provides that:

"Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art."

Furthermore, M.P.E.P. § 2144.03 provides that:

"there must be some form of evidence in the record to support an assertion of common knowledge. See In re Lee, 277 F.3d at 1344-45,

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61 USPQ2d at 1434-35 (Fed. Cir. 2002); Zero, 258 F.3d at 1386, 59 USPQ2d at 1697 (holding that general conclusions concerning what is "basic knowledge" or "common sense" to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection)."

(Emphasis added). See also In re Lee, 277 F.3d at 1343-44, 61 USPQ2d at 1433-34 (Fed. Cir. 2002) (the examiner's finding of whether there is a teaching, motivation or suggestion to combine the teachings of the applied references must not be resolved based on "subjective belief and unknown authority." but must be "based on objective evidence of record.").

No such objective evidence has been provided by the Examiner here, nor did the Examiner submit an affidavit as required by 37 C.F.R. § 1.104(d)(2) if the Examiner's proposed motivation was based on facts within his personal knowledge (see M.P.E.P. § 2144.03). Applicants respectfully request that the Examiner provide an affidavit as required by 37 CFR § 1.104(d)(2) if this rejection continues to be maintained based a motive for modification not explicitly suggested in the prior art (see MPEP § 2144.03).

Finally, among other things the surface illumination device of claim 11 includes <u>a side light section comprising</u> a light emission section and <u>a light quide</u> <u>body section</u> for propagating the light emitted by the light emission section to widely introduce it into an end face of the light guide plate, and un-divergence means for reducing a degree of divergence of light incident on an end face of the light guide plate, the un-divergence means including a prism body section formed integral with <u>the light guide body section</u> of the side light section.

The Office Action asserts that such features are disclosed by Okawa in FIG.

Applicants respectfully disagree and do not see any such feature shown in Okawa.

Accordingly, for at least these additional reasons, Applicants respectfully

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submit that claims 4, 9 and 11 are patentable over the cited prior art.

Claim 5

Among other things, in the surface illumination device of claim 5, the side light section includes a polarizing section that has a polarizing axis parallel with a direction of electric vector's vibration of an s-polarized light component of a reflecting light ray caused in a reflecting prism face of a light guide plate by an incident light ray in a predetermined propagation direction.

Applicants respectfully submit that Taira does not disclose such a feature.

The Office Action cites col. 21, lines 13-16. However the cited text merely teaches that quarter-wave plate 2609 provides a linearly polarized beam (S) to the light guide plate. It does not teach quarter-wave plate 2609 has a polarizing axis parallel with a direction of electric vector's vibration of an s-polarized light component of a reflecting light ray caused in a reflecting prism face of a light guide plate by an incident light ray in a predetermined propagation direction.

Also, among other things, the surface illumination device of claim 5 includes a light guide plate that has a reflecting prism face and a light exit face opposite to the prism face.

Applicants respectfully submit that <u>Taira</u>'s light guide plate does not have a reflecting prism face. The v-shaped grooves in light guide plate 2611 are not reflecting prism faces. Applicants note that the device of the cited FIG. 31 includes mirror-face reflection sheet 2612 in order to reflect the light.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 5 is patentable over <u>Taira</u>.

Claim 6

Claim 6 depends from claim 5. <u>Okawa</u> does not remedy the shortcomings of <u>Taira</u> with respect to claim 5. Accordingly, claim 6 is deemed patentable for at least the reasons set forth above with respect to claim 5, and for the following additional reasons.

Applicants respectfully traverse the proposed combination of <u>Taira</u> and <u>Okawa</u> as lacking any teaching or suggestion in the prior art.

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As explained above with respect to claims 4, 9 and 11, citing M.P.E.P. §§ 2143.03 & 2144.03 and In re Lee, the examiner's finding of whether there is a teaching, motivation or suggestion to combine the teachings of the applied references must not be resolved based on "subjective belief and unknown authority," but must be "based on objective evidence of record" (e.g., a citation to a prior art reference that specifically provides the proposed motivation).

No such objective evidence has been provided by the Examiner here, nor did the Examiner submit an affidavit as required by 37 C.F.R. § 1.104(d)(2) if the Examiner's proposed motivation was based on facts within his personal knowledge (see M.P.E.P. § 2144.03). Applicants respectfully request that the Examiner provide an affidavit as required by 37 CFR § 1.104(d)(2) if this rejection continues to be maintained based a motive for modification not explicitly suggested in the prior art (see MPEP § 2144.03).

Accordingly, for at least these additional reasons, Applicants respectfully submit that claim 6 is patentable over the cited prior art.

Claims 7 and 8

Claims 7 and 8 depend from claim 2 are all deemed patentable for at least the reasons set forth above with respect to claim 2, and for the following additional reasons.

Among other things, in the surface illumination device of claim 7, the predetermined propagation direction is a propagation direction in which the incident light ray can make a plane of incidence that is perpendicular to the reflecting prism face and the light exit face. Meanwhile, in the surface illumination device of claim 8, the predetermined propagation direction is a direction along a plane perpendicular to a longitudinal direction of the swath-shaped face.

The Office Action fairly concedes that these features are not disclosed by Masuda, but – without any support or citation in the prior art – states that it would have been obvious to modify <u>Masuda</u> to include such features.

Applicants respectfully submit that the Examiner is using impermissible hindsight reconstruction to cobble together some device that resembles Applicants

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claimed invention, rather than finding the claimed invention in the prior art.

Meanwhile, the cited <u>Span-Deck</u> case cited in the Office Action is not applicable here. The features of claims 7 and 8 do not involve a mere "change of form or shape of an invention," but instead describe beneficial relationships between a reflective prism face and a predetermined propagation direction. The cited prior art does not suggest this relationship, which the examiner apparently concedes increases the efficiency of the device.

Meanwhile, as explained above with respect to claims 4, 9 and 11, citing M.P.E.P. §§ 2143.03 & 2144.03 and In re Lee, the examiner's finding of whether there is a teaching, motivation or suggestion to modify the teachings of the applied references must not be resolved based on "subjective belief and unknown authority." but must be "based on objective evidence of record" (e.g., a citation to a prior art reference that specifically provides the proposed motivation).

No such objective evidence has been provided by the Examiner here, nor did the Examiner submit an affidavit as required by 37 C.F.R. § 1.104(d)(2) if the Examiner's proposed motivation was based on facts within his personal knowledge (see M.P.E.P. § 2144.03). Applicants respectfully request that the Examiner provide an affidavit as required by 37 CFR § 1.104(d)(2) if this rejection continues to be maintained based a motive for modification not explicitly suggested in the prior art (see MPEP § 2144.03).

Accordingly, for at least these additional reasons, Applicants respectfully submit that claims 7 and 8 are patentable over <u>Masuda</u>.

Claim 10

Claim 10 has been amended to correct it dependency to depend from claim 6, rather than claim 4. Therefore, the pending rejection of claim 10 is deemed moot. Meanwhile, claim 10 is deemed patentable for at least the reasons set forth above with respect to claim 6, and also because the cited art, taken as a whole, does not disclose or suggest a device including all of the features of claim 10, specifically including the prism body section formed on the polarizing section.

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Claim 12

Claim 12 depends from claim 2 and is deemed patentable for at least the reasons set forth above with respect to claim 2.

Claim 13

Claim 13 depends from claims 2 and 12. <u>Umemoto</u> does not remedy the shortcomings of <u>Masuda</u> with respect to claims 2 and 12. Accordingly, claim 13 is deemed patentable for at least the reasons set forth above with respect to claim 2, and for the following additional reasons.

Applicants respectfully traverse the proposed combination of <u>Masuda</u> and <u>Umemoto</u> as lacking any teaching or suggestion in the prior art.

As explained above with respect to claims 4, 9 and 11, citing M.P.E.P. §§ 2143.03 & 2144.03 and In re Lee, the examiner's finding of whether there is a teaching, motivation or suggestion to combine the teachings of the applied references must not be resolved based on "subjective belief and unknown authority," but must be "based on objective evidence of record" (e.g., a citation to a prior art reference that specifically provides the proposed motivation).

No such objective evidence has been provided by the Examiner here, nor did the Examiner submit an affidavit as required by 37 C.F.R. § 1.104(d)(2) if the Examiner's proposed motivation was based on facts within his personal knowledge (see M.P.E.P. § 2144.03). Applicants respectfully request that the Examiner provide an affidavit as required by 37 CFR § 1.104(d)(2) if this rejection continues to be maintained based a motive for modification not explicitly suggested in the prior art (see MPEP § 2144.03).

Furthermore, Applicants respectfully submit that <u>Umemoto</u> does not disclose the reflecting prism face extending so that a direction of electric vector vibration of an s-polarized light component of a reflecting light ray caused by an incident light ray in the predetermined propagation direction is also in parallel with a polarization axis of the second polarizing plate. Indeed, the Office Action seems to concede this, instead offering a conclusory statement that the reflecting prism face would <u>obviously</u> extending so that a direction of electric vector vibration of an s-polarized

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light component of a reflecting light ray caused by an incident light ray in the predetermined propagation direction is also in parallel with a polarization axis of the second polarizing plate.

Absolutely no support is provided whatsoever for this conclusory statement.

Again, the examiner's finding of whether there is a teaching, motivation or suggestion to modify the teachings of the applied references must not be resolved based on "subjective belief and unknown authority," but must be "based on objective evidence of record" (e.g., a citation to a prior art reference that specifically provides the proposed motivation).

No such objective evidence has been provided by the Examiner here, nor did the Examiner submit an affidavit as required by 37 C.F.R. § 1.104(d)(2) if the Examiner's proposed motivation was based on facts within his personal knowledge (see M.P.E.P. § 2144.03). Applicants respectfully request that the Examiner provide an affidavit as required by 37 CFR § 1.104(d)(2) if this rejection continues to be maintained based a motive for modification not explicitly suggested in the prior art (see MPEP § 2144.03).

Accordingly, for at least these additional reasons, Applicants respectfully submit that claim 13 is patentable over the cited prior art.

Claim 14

Claim 14 has been amended to correct it dependency to depend from claim 13, rather than claim 3. Therefore, the pending rejection of claim 14 is deemed moot. Meanwhile, claim 14 is deemed patentable for at least the reasons set forth above with respect to claim 13.

Claims 15-16

REQUEST FOR ENGLISH TRANSLATION OF CITED DOCUMENT

At the outset, <u>Shinohara</u> is published in Japanese, not English. M.P.E.P. § 706.02 provides that:

If the document is in a language other than English and the

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examiner seeks to rely on that document, a translation must be obtained so that the record is clear as to the precise facts the examiner is relying upon in support of the rejection.

Accordingly, rejections based on <u>Shinohara</u> are inappropriate unless the Examiner has provided a full translation of that document, which he has not done here. Therefore, if the Examiner desires to maintain a rejection of any of Applicants' claims based on <u>Shinohara</u> in a subsequent Office action, Applicants respectfully request that he supply an English translation of the full text (not just the abstract) of the document, as required by M.P.E.P. § 706.02.

Also, among other things, the surface illumination devices of claims 15 and 16 each include <u>a side light section</u> comprising a light emission section, <u>a light guide</u> <u>body section</u>, and un-divergence means for causing a degree of divergence of the light incident on an end face of the light guide plate to be reduced, the un-divergence means comprises <u>a prism body section formed integral with the light guide body section</u>.

From inspection of the cited FIG. 44 of <u>Shinohara</u>, Applicants respectfully submit that it is clear that the cited element 50, supposedly corresponding to the recited prism body section, is not formed integral with element 45, cited as supposedly corresponding to the light guide body section.

Accordingly, for at least these additional reasons, Applicants respectfully submit that claims 15 and 16 are patentable over <u>Shinohara</u>.

CLAIMS 17-21

New claims 17-21 all depend from claim 3 are all depend patentable for at least the reasons set forth above with respect to claim 3, and also, variously, because of reasons set forth above with respect to claims 4, 5, 9, 10, and 11, respectively.

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CONCLUSION

In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 2-21 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment (except for the issue fee) to Deposit Account No. 50-0238 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17, particularly extension of time fees.

Respectfully submitted,

VOLENTINE FRANCOS & WHITT, P.L.L.C.

Date: 8 September 2006

Kenneth D. Springer Registration No. 39,843

VOLENTINE FRANCOS & WHITT, P.L.L.C. One Freedom Square 11951 Freedom Drive, Suite 1260 Reston, Virginia 20190

Telephone No.: (571) 283.0724 Facsimile No.: (571) 283.0740

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